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MAY 21 2010

Ref: EPR-N

Teresa Johnson
Project Manager
Bureau of Land Management
Wyoming High Plains District Office
2987 Prospector Drive
Casper, WY 82604

Re: Draft EIS for Buckskin Mine Hay Creek II Coal Lease Application [CEQ# 20100069]

Dear Ms. Johnson:

The U.S. Environmental Protection Agency (EPA) has reviewed the Bureau of Land Management's (BLM) Draft Environmental Impact Statement (EIS) for Buckskin Mine Hay Creek II Coal Lease Application to assess the consequences of holding competitive sales within the study area on 1,883 acres of federally-owned solid minerals making available 269.7 million tons of surface-mineable coal in the Powder River Basin (PRB) of Wyoming. Our review and comments are provided pursuant to Section 102(2)(C) of the National Environmental Policy Act (NEPA), 42 U.S.C. Section 4332(2)(c) and Section 309 of the Clean Air Act, 42 U.S.C. Section 7609.

The Draft EIS analyzes the no action alternative (Alternative 1), the proposed action (lease limited to just the tract proposed by the mining company for 419 acres and 77 million tons of coal reserve, and an alternative tract configuration (Alternative 2) that includes the tract for the proposed action along with additional coal reserves bounded by the BLM study area for this Draft EIS. Other alternatives were considered but not analyzed.

Air quality continues to be one of EPA's main concerns for the energy activities in the PRB. Large surface coal mines are significant particulate matter emission sources in the PRB and contribute to air quality degradation in the area. During many recent years and although the Buckskin Mine itself has not recorded high PM_{10} events, air quality monitoring in the PRB area has shown exceedances of the PM_{10} (particulate matter less than 10 micrometers in diameter, commonly referred to as fugitive dust) standards. Air quality modeling results from the PRB Coal Review for cumulative air quality impacts also predict additional increases in PM_{10} emissions for the PRB mining area, including exceedances of the PM_{10} National Ambient Air Quality Standards (NAAQS) and Prevention of Significant Deterioration (PSD) increments. Although the Wyoming Department of Environmental Quality (WDEQ) is the air permitting

authority for the area, in light of the considerable cumulative impacts, the Final EIS should consider additional mitigation measures for PM_{10}, including more stringent dust control measures than those imposed by state permits, such as Best Available Control Technology (BACT) and Best Available Control Measure (BACM), and mitigation to reduce fugitive dust from mining the lease tracts and the cumulative effects of mining in other parts of the PRB area.

EPA also has concerns about the impacts of nitrogen dioxide emissions from the proposed action and needs to see a demonstration of compliance with the new one-hour NO_2 standard. Blasting that is performed to remove overburden to gain access to the coal seams can result in emissions of several products, including NO_2, because of the potential for incomplete combustion of explosives used in the mining process. Depending on the proximity of public exposure to fumes from blasting explosives, it may be appropriate to incorporate other mitigation measures into the terms of the leases. One control measure that has been successful at other PRB mines might be the use of smaller numbers of blastholes or blastholes loaded with reduced amounts of explosives to obtain more complete combustion or better control of this NO_2 generation process.

The existing PRB Coal Review studies were used effectively in the Draft EIS discussion of the cumulative air quality impacts. We understand that an update to the PRB Coal Review air quality analysis was made in 2008 using a revised baseline year of 2004 with maximum emission levels projected for year 2015. This update is a proactive action by BLM that we support and we are always willing to provide assistance or participate in air quality working groups if needed. The results of such updated analyses might inform appropriate control measures or strategies to be developed to avoid any adverse future impacts.

EPA's other main concern relates to the project's potential impacts on aquatic resources. The Draft EIS identifies 64 acres of wetlands in the BLM study area, 31 of which may be jurisdictional waters of the United States for purposes of the Clean Water Act (CWA). However, the U.S. Army Corps of Engineers (Corps) has not yet performed a CWA jurisdictional determination regarding the waters of the United States in the project area. This determination has been deferred until later in the CWA Section 404 permitting process and must be performed by the Corps. Pursuant to CWA Section 404 implementing regulations, the CWA Section 404(b)(1) Guidelines (40 C.F.R. Part 230), the Corps cannot issue a CWA Section 404 permit for the discharge of dredged or fill material into waters of the United States when there are other practicable alternatives to the proposed discharge that would have less adverse effects on the aquatic ecosystem. 40 C.F.R. § 230.10(a). Under the Guidelines, the Corps can issue the permit only for the least environmentally damaging practicable alternative (LEDPA). Based upon the very limited information presented in the DEIS, EPA believes that the preliminary preferred alternative, Alternative 2, likely does not represent the LEDPA for purposes of compliance with the Guidelines. According to the DEIS, less than half an acre of wetlands would be impacted by the proposed action whereas as much as 31 acres of noncontiguous acres of wetlands would be impacted by Alternative 2. EPA recommends coordination with the Corps in order to ensure the project complies with the Guidelines and the Corps can move forward with the CWA Section 404 permitting process.

Consistent with Section 309 of the Clean Air Act, it is EPA's responsibility to provide an independent review and evaluation of the potential environmental impacts of this project. In accordance with our policies and procedures for reviews under NEPA and Section 309 of the Clean Air Act, EPA is rating this Draft EIS as EC-2 (EC - Environmental Concerns, 2 - Insufficient Information). This rating means that our review identified environmental impacts that should be avoided in order to fully protect the environment and the Draft EIS does not contain sufficient information or thorough analysis to fully assess the potential impacts of the project. In addition to EPA's detailed comments on the Draft EIS, a full description of EPA's EIS rating system is enclosed.

Please see the following detailed comments for our specific environmental and informational concerns. If you have any questions regarding our comments or this rating, please contact me at (303) 312-6004, or you may contact James Hanley of my staff at (303) 312-6725.

Sincerely,

Larry Svoboda
Director, NEPA Compliance and Review Program
Office of Ecosystems Protection and Remediation

Enclosure

General Technical Comments

Purpose and Need

1) The stated purpose of the proposed action is to provide a feasible method for the existing mine operator to avoid or bypass the Sand Channel Area to reach coal in the existing Spring Draw Lease. More information or a figure showing the sand channel area as a geological feature that affects the ability of the mining company to implement its approved mining plan would be helpful.

Proposed Action and Alternatives

2) EPA does not understand the difference between the no action alternative and Alternative 4 (delayed lease sale).

Specific Technical Comments

3) 1.1.3.4 Reclamation Activities, Page 1-12. The narrative language explaining the information in Table 1-3 has misplaced a decimal point in the percentage of land disturbance associated with long-term mining facilities (27.1% vs. 273%).

4) 2.2.3.1 Description of the BLM Study Area, Page 2-9. The Kiewit estimates of the BLM study area vary somewhat from the BLM estimates for the same coal reserve quantities. One explanation may be in the assignment of 56% as the recoverable factor for the in-place coal reserves when this number has been 70% historically over the life of the Buckskin Mine production. EPA recommends that this discrepancy be clarified in the Final EIS.

General Technical Air Quality Comments

The DEIS for the Buckskin Mine Hay Creek II Coal Lease Application presented results for both project-specific and cumulative air quality impact results for most criteria pollutants and Air Quality Related Values (AQRVs). Ozone analysis was not conducted but we understand from coordination meetings we hold with the BLM Wyoming State Office that the next update to the PRB Coal Review air quality analysis will include quantitative ozone analysis The project-specific analysis was conducted utilizing the ISCLT3 air dispersion model for near field impacts. The near-field results for the project-specific direct impacts for the mine were all less than the National Ambient Air Quality Standard (NAAQS) and Prevention of Significant Deterioration (PSD) standards.

Results of the cumulative analysis for the Powder River Basin (PRB) Coal Review (2008) were presented in Tables 4-11, 4-12 and 4-13 of the DEIS. The PRB Coal Review analysis was conducted utilizing the CALPUFF modeling system for sources throughout the PRB. EPA recognizes that the predicted adverse cumulative air quality impacts reflect conditions from all existing major permitted and unpermitted minor sources in the PRB region. The contribution to these predicted cumulative impacts from the proposed action is less readily apparent from the discussion in the Draft EIS.

The PRB Coal Review cumulative analysis predicted several adverse air quality impacts for the base case year of 2004 and future year of 2015 for the lower and upper reasonably foreseeable production scenarios.

1) For the 24-hour $PM_{2.5}$ in Wyoming, the base case results for 2004 predicted 88 $\mu g/m^3$ and for the future years both lower and higher 2015 production scenarios were 180 $\mu g/m^3$– well over the 24 hour NAAQS of 35 $\mu g/m^3$.

2) For the 24-hour PM_{10} in Wyoming, the base case results for 2004 predicted 250 $\mu g/m^3$and for the future years both lower and higher 2015 production scenarios were 513 $\mu g/m^3$– well over the 24 hour NAAQS of 150 $\mu g/m^3$.

3) For NO_2 in Montana, the base case results for 2004 predicted 409 $\mu g/m^3$and for the future years both lower and higher 2015 production scenarios were 826 $\mu g/m^3$– well over the new 1-Hour NO_2 NAAQS of 100 ppb (189 $\mu g/m^3$). The 1-hour NO_2 NAAQS was recently promulgated nationally and was not presented in the DEIS for Wyoming for either the direct or cumulative impact analysis.

4) For the PM_{10} PSD increment analysis, the base case result for Northern Cheyenne Indian Reservation and Wind Cave National Park indicated predictions (10 $\mu g/m^3$and 11 $\mu g/m^3$, respectively) over the PSD allowable increment of 8 $\mu g/m^3$. For the future years both the lower and higher 2015 production scenarios at the Northern Cheyenne Indian Reservation and Wind Cave National Park (14 $\mu g/m^3$and 13 $\mu g/m^3$, respectively) were over the PSD allowable increment.

5) Table 4-13 presents multiple adverse visibility impacts (greater than 10% visibility impairment) occurring at Class I and Sensitive Class II areas, including 26 days of impairment at Badlands National Park, 32 days of impairment at Northern Cheyenne Indian Reservation and 18 days of impairment at Wind Cave National Park for the future lower production scenario of 2015.

EPA understands that BLM has undertaken further analysis for the PRB sources that includes addressing ozone impacts. EPA is very concerned with the cumulative impact analysis results indicating degradation of air quality conditions from the PRB sources in the region. While it is not clear from the 2008 PRB Coal review specifically which sources are contributing to these impacts, the BLM should ensure that sources that are within BLM jurisdiction and management authority and are contributing to these cumulative impacts are appropriately identified and mitigated during the permitting process. We recommend that BLM convene a stakeholder working group to address our concerns through the modeling protocol and subsequent analysis.

Section 3.4.2.3 (Page 3-56) references the Memorandum of Agreement (MOA) between the WDEQ and EPA (January 24, 1994), which acknowledges that some limitations may exist in modeling short term PM_{10} and that PM_{10} monitoring should be used for compliance purposes. The control measures described in the Draft EIS Section 3.4.2.3 provide a significant level of point source and fugitive dust control and should be updated with cooperation from the WDEQ as appropriate and if exceedance of a standard occurs. A condition of the MOA is to continue PM_{10} monitoring near the mine to ensure compliance with the 24-hour PM_{10} NAAQS. BLM should ensure that the mine operators consult with the WDEQ on any monitoring site adjustments or new monitor locations to correspond with changes in the mining activity. Particular attention should be given to shifts in the location of the active mining areas and the placement of air monitoring sites in order to determine maximum impacts from the mine.

Specific Technical Air Quality Comments:

1) Table 3.4-1 (Page 3-43) should include the newly promulgated 1-hour NO_2 NAAQS including appropriate background concentration.
2) Table 3.4-2 (Page 3-45) should be updated to reflect more current data through 2009.
3) Section 3.4.2.1 (Page 3-42) EPA notes that the new 1 hour NO_2 NAAQS was not addressed in the Draft EIS. We recommend that the 1-hour NO_2 direct impact analysis be included if reasonably possible from modeling already conducted.
4) Section 3.4.2.3 (Page 3-56) The EIS should provide an update that includes a discussion on the Exceptional Event Rule (40CFR Parts 50 and 51, 2007).
5) Section 3.4.3.1, (Page 3-58) The EIS should include a discussion on the newly promulgated NO_2 NAAQS in relation to NO_2 emissions from the facility.